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NOTES ON THE FAUNA ABOUT THE
HEADWATERS OF THE ALLE-
GHENY, GENESEE AND SUS-
QUEHANNA RIVERS IN
PENNSYLVANIA.

During early June of 1906, the following fishes were found in a tributary of the Allegheny near Port Allegheny, in McKean County:

Campostoma anomalum, *Pimephales notatus*, *Semotilus atromaculatus*, *Rhinichthys atronasmus*, *Hypobopsis kentuckiensis*, *Catostomus commersonnii*, *Bolbosoma nigrum* and *Etheostoma flabellare*.

The broad valley of this section offers more varied conditions than the upper headwaters, which are but small mountain brooks. *Plethodon erythronotus*, *P. glutinosus*, *Desmognathus fusca*, both forms of *Diemictylus viridescens*, *Bufo americanus*, *Hyla pickeringii*, *Rana palustris*, *R. clamata*, *R. catesbeiana*, *R. sylvatica* and *Thamnophis sirtalis* were also found. *Cryptobranchus alleganiensis* was reported to occur abundantly sometimes, though not met with on this trip.

In the summer of 1904, *Gyrinophilus porphyriticus*, *Spelerpes bislineatus*, *Plethodon erythronotus*, *Desmognathus fusca*, *Diemictylus viridescens*, *Bufo americanus*, *Rana palustris*, *R. clamata*, *R. catesbeiana* and *R. sylvatica* were found. All of these amphibians are typical of the hemlock forests.

In the headwaters of the Genesee in Potter Co. the following were found in June of 1906: *Salvelinus fontinalis*, *Semotilus atromaculatus*, *Rhinichthys atronasmus*, *Catostomus commersonnii*, *Erimyzon succetta oblongus*, *Ameiurus nebulosus*, *Schilbeodes gyrimus* and *Cottus gracilis*. Only *Salvelinus* and *Rhinichthys* were found in the very small brooks or rills, and this was also true of those in the Allegheny and Susquehanna drainages. The Genesee *Rhinichthys* was very dark, inclining largely to a dusky or black-

ish color. Though some examples had a pale area in place of the usual dark lateral band, that of the breeding male varied from a dull dark red to a deep wine color on the trunk. Many had the lower sides of their bodies variegated with dusky and the tops of their heads finely granular. *Desmognathus fusca* occurs very abundantly and some few examples of *Plethodon erythronotus* were found, though the latter did not appear to be so abundant as in the hemlock forests near Port Allegheny. Though *P. glutinosus* was not found at Gold Potter County it was met with in the Allegheny Valley at Seven Bridges. Other species about Gold were *Diemictylus viridescens*, *Bufo americanus*, *Hyla pickeringii*, *Acris gryllus crepitans*, *Rana palustris*, *R. clamata*, *R. sylvatica* and *Lampropeltis doliatus triangulus*, *Liopeltis vernalis* and *Sternothaerus odoratus* were reported though not met with.

The smaller headwaters in the Allegheny and Susquehanna valleys offered the same meagre fish-fauna as the Genesee and about the only fish were *Salvelinus fontinalis* and *Rhinichthys atronasus*. Near Brooklyn in Potter Co. *Spelerpes bislineatus* was found and near Kilburne *Natrix sipedon*.

The writer, in company with H. W. Fowler, spent their vacations for three years in the places mentioned. Thinking the Geographical distribution of the species listed proving of possible interest, they are herewith presented.

THOMAS D. KEIM,
Stelton, N. J.

LATE-BREEDING SPADE-FOOT TOADS, ETC.

On the evening of August 4, 1915, enormous numbers of Spadefoot Toads, (*Scaphiopus holbrookii*) appeared in Patchogue, Yaphank, Middle Island and Coram. I made a twenty-five mile circuit through the villages named, and found the toads in